DOCUMENT RESUME

ED 183 205 IR 008 155

AUTHOR Schneider, Frederick C.
TITLE Instructional Television in Virginia. Telecommunications Study Commission, Working Paper No. 8.
INSTITUTION Virginia State Telecommunications Study Commission, Richmond.
PUB DATE 23 Aug 79
NOTE 33p.: For related documents, see IR 008 153, IR 008 156, and IR 008 158

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Agency Role: Cable Television: *Educational Television: Financial Support: Management: Programing (Broadcast): *State Agencies: *State Programs: *Telecommunication
IDENTIFIERS *Virginia

ABSTRACT

The role of state organizations in instructional television programming, program selection, production, and distribution are discussed and the overall management, funding, and cost forecasting for ITV are explored. Instructional television in Virginia, as discussed in this paper, is defined as the presentation via video format of information to be used in a regular course of instruction for credit at any academic level and can include any programming available over a broadcast or cable system that is used by an instructor as part of the course. The agencies and organizations most involved with the delivery of ITV programming in the Commonwealth are the Virginia Public Telecommunications Council, the Regional Schools Contract Planning Committees, the Department of Education, and the Public Television Stations staff. (RAO)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED183205

Working Paper # 8

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

TELECOMMUNICATIONS STUDY COMMISSION

"INSTRUCTIONAL TELEVISION IN VIRGINIA"

AUGUST 23, 1979

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Gilbert W. Fairholm

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A Staff Report by: FREDERICK C. SCHNEIDER

Gilbert W. Fairholm
Executive Director

Lawrence Douglas Wilder
Chairman
Thomas C. Boushall
Vice-Chairman
Patsy D. Carpenter
Dudley J. Emick, Jr.
Calvin W. Fowler
Nathan H. Miller
Thomas W. Moss, Jr.
Bonnie L. Paul
S. Wallace Stieffen
William T. Wilson
William L. Zimmer, III

IR000158

INTRODUCTION

Instructional Television (ITV)

It is not unusual to think of ITV as the instructional programming distributed via public television stations between 9:00 a.m. and 3:30 p.m. As discussed in this paper, instructional television might better be thought of as the presentation via video format of information to be used in a regular course of instruction for credit at any academic level. That definition permits a view beyond the more limited definition of instructional television programming defined below. Instructional television as used here can include any programming available over a broadcast or cable system that is used by an instructor as a part of the course. There is no limit to the time of day or to programs specifically designed for instructional purposes, although there are those that prefer that only those programs designed for instruction be included.

Further, the definition permits the inclusion of any program used for the purpose described, and presented using a TV monitor. The original form is not of particular importance. The program may be a film broadcast via a PTV station, packaged in a cassette and played back using a desk and monitor in one classroom or it can be a live event taking place in an auditorium and distributed to classrooms using cable. Instructional television really only refers to the display system.

While much of this paper may be concerned with PTV station broadcast of instructional television programming, the bottom

line is instruction of students using a video format for presentation of at least part of the material. It is acknowledged that Instructional Television Programming has been defined by the U.S. Department of Health, Education and Welfare as: "lesson-planned programs developed and conducted largely in school systems or universities, often with the option for credit" (Seibert, 1975, p. 105). The HEW definition, notwithstanding the definition explained above, should be helpful in understanding the discussion which follows.

Organizations for Oversight of the ITV in the Commonwealth

The agencies and organizations most involved with the delivery of ITV programming in the Commonwealth are:

1. The Virginia Public Telecommunications Council and its telemedia staff (VPTC).

   The VPTC has a legislative mandate, among other functions, to negotiate and administer contracts made to each TV licensee. In doing this, they endeavor to coordinate among regional school divisions as well as meet specifically identified regional programming needs articulated by the Regional Schools Contract Planning Committees (RSCPCS) and DOE.

2. RSCPCS

   The Regional Schools Contract Planning Committees are composed of superintendents and/or their representatives from each of the school divisions within the broadcast area of each of the five public television stations in the Commonwealth. In addition both the station and DOE each have a representative on the RSCPC. The five RSCPC groups meet regularly to determine local area (regional) needs for ITV programming and services. Their composit lists of ITV programs/series and services represent a priority-ranked list of needs that form the basis of the annual VPTC ITV contract process.

3. The Department of Education (DOE)

   The Virginia Department of Education is another statewide

coordination and oversight agency (with VPTC). From 1976-1979, the department had ITV contract funds within its budget. The DOE's Telecommunications Service administrative budget accounts for a very small amount of the total ITV funds expended. The DOE does retain an active involvement in assuring the proper "educational" use of all ITV contract funds.

4. The Public Television Stations staff

The PTV staff coordinate the RSCPC planning and decision making process, negotiate with the VPTC staff on a contract and, subsequent to agreement, deliver to DOE a recommended service program consisting of scheduling and broadcast service, production, utilization and technical assistance and some school equipment maintenance.

PROGRAM SOURCES

Selection Process

The ITV broadcast schedule is actually the result of the interaction of the RSCPC, VPTC, DOE and the PTV station. The RSCPC is formed by the PTV station and is responsible for selecting program and services for recommendation to the DOE.

The exact procedure of program selection varies from one RSCPC to another. The similarities, however, are much more significant than differences. Subject/content areas in which programming needs exist are identified. The RSCPC and station carry out a preliminary selection of existing programs that may meet specific needs in the RSCPC area. The preliminary selection is followed by a preview process during which teachers who will be using the series or their representatives, observe sample programs and offer opinions regarding acquisition.

Instructional series are available from many nationwide distribution services such as the Agency for Instructional Television (AIT) and the Great Plains National Instructional Library (GPN). In addition, the Department of Education's Bureau of Teaching Materials (BTM) maintains copies of all individual programs or series produced with state funds or acquired for statewide use. These are available free to the schools. Film companies such as Encyclopedia Britannica Films also serve as sources for instructional programming.

A decision regarding a recommendation of purchase or lease of a program is made by the RSCPC. Taken into consideration are such factors as the anticipated useful life of a program

and the expected need for the program or series over a number of years.

The purchase or lease is generally carried out by the individual PTV station within its ITV contract with the state. The stations are also members of consortia such as the Eastern Educational Network and Southern Educational Communicatcn Association and as such can purchase or lease some programs for substantially less than might be the case if the purchase was made outside the consortium. Occasionally, two or more stations will cooperate on the purchase or lease of a program series to be used by each station. The DOE and the VPTC contracts administrators have been active in the promotion of group purchasing whenever possible. They have been only partially successful in this regard.

Production

Certain identified needs cannot be met with programs or series available through purchase or lease agencies or other PTV stations in Virginia. A RSCPC may decide that a program or series should be produced. Through the contract system, the station associated with the particular RSCPC is hired to produce that program or series. The DOE is aware of proposed contracts for each station and attempts to limit the duplication of effort that might occur with the current contracting system. The VPTC serves in a similar capacity. Recognizing the special areas of expertise of the DOE and VPTC, it seems logical that the DOE should be concerned with economics as it relates to programming needs and content applicability around

the state and the VPTC should have more familiarity with the specific capabilities of the stations and be in a position to suggest the appropriate PTV station (or commercial vendor) to deliver the service.

The DOE, using its own funds, produces an in-service program entitled On and About Instruction. The program is primarily intended for teachers and administrators of the various school divisions. Another portion of the DOE Telecommunication Service administrative budget goes toward the acquisition of the ITV series for statewide use. Funding for the broadcast of the program is accomplished by including it as part of the individual contracts with PTV stations.

Distribution

Instructional television programming for public schools is available from two primary services. One is the Bureau of Teaching Materials (BTM) of the Department of Education. In 1978 the BTM initiated a video-tape library distribution program similar in many ways to its already extant film library. The second distribution system is more complex and far-reaching than the BTM tape library. It is the instructional television programming broadcast over PTV stations by four PTV corporations.

The total potential public school student audience of either of the two distribution systems in September, 1978, was 1,055,238 (Delp, 1979).

Using 1977-78 enrollment figures, there were 702,437 elementary pupils and 445,608 secondary pupils. These pupils had 65,193

persons filling all instructional positions (Facing Up, 13, 1979, p. 16).

There are 1808 buildings in 134 city and county school divisions. The broadcast video signal can reach these buildings and classrooms in a number of ways. No matter how the signal reaches the room, television monitors are needed to display the information. There were 5,195 color television receivers and 12,810 black and white receivers available to teachers using the classrooms in those buildings.

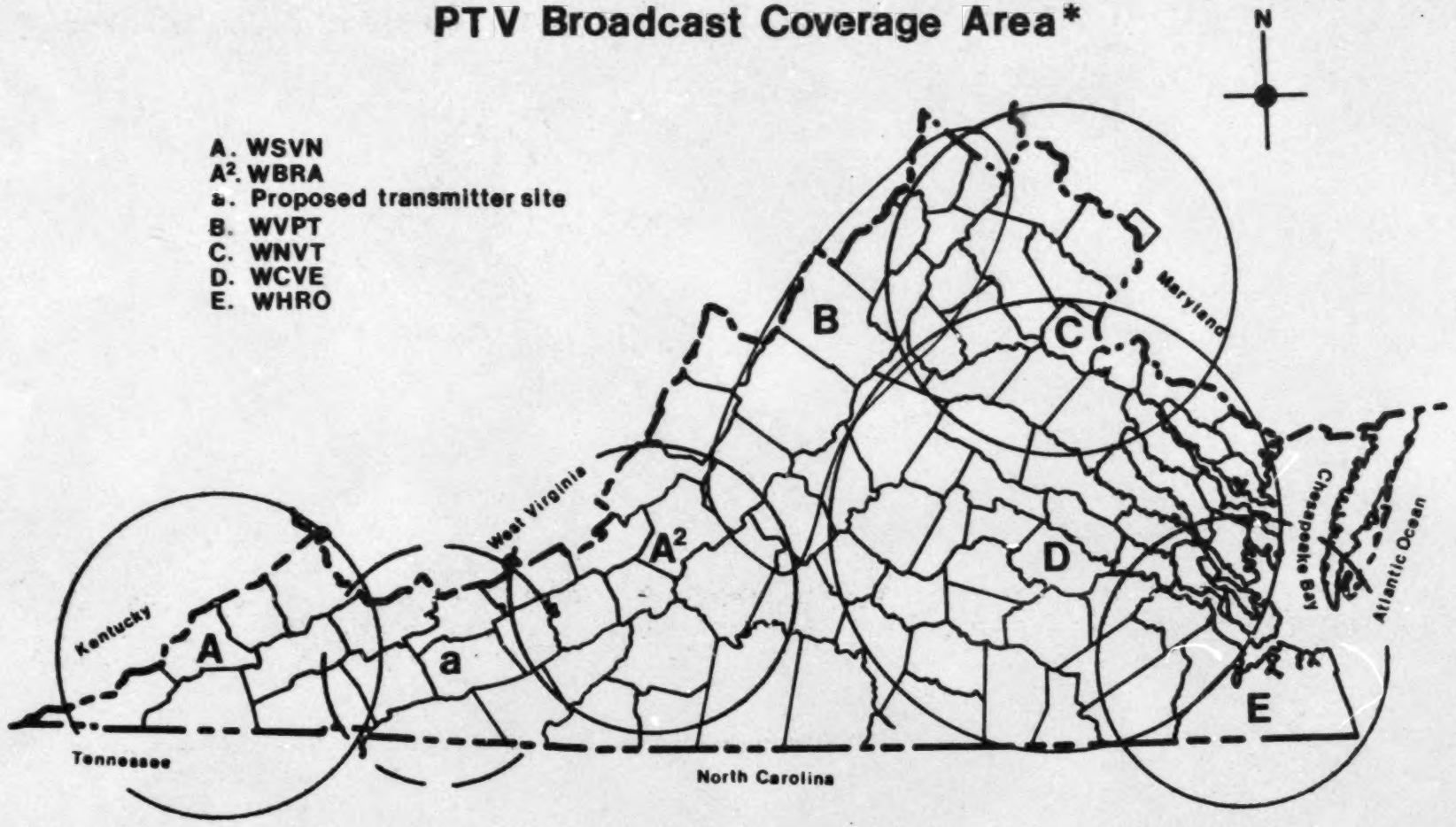
While receivers are needed for display of a broadcast signal, there is also equipment available that permits the taping of programs for later use. Some of this equipment can be used to play-back tapes received from the BTM. The school districts of Virginia reported having the following:

Reel-to-reel videotape recorders	1,127
Video cassette recorder/players	1,718
Video cassette player	1,005
Total VCR/VTR units =	3,850 (Delp, 1979)

The video cassette players cannot be used for recording. The BTM is equipped for distributing video cassettes rather than programs on reel-to reel tapes.

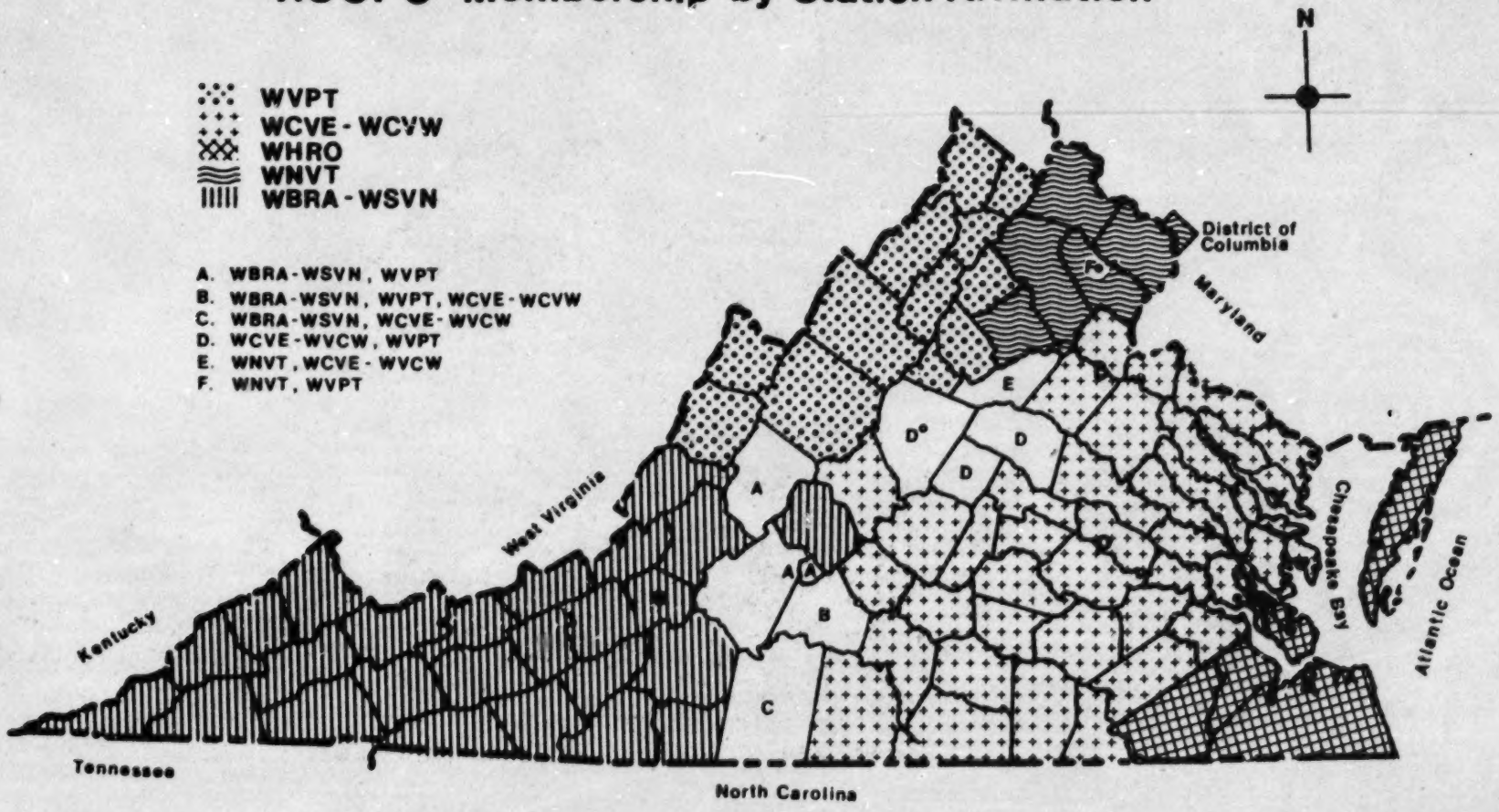
This equipment information should be considered in only the most general way. It is factual in that the school districts did report the existence of the equipment. It is not clear that the equipment is in operating order, subjected to regular maintenance and repair, or used by teachers.

PTV Broadcast Coverage Area*



*Not including extended broadcast provided by translators

RSCPC* Membership by Station Affiliation



RSCPC* Regional Schools Contract Planning Committee

At this time the broadcast signals from PTV stations do not reach all of the buildings in all of the school districts. The map (page 5) shows the broadcast range of each of the stations in Virginia. In some cases, the signal is also carried by cable companies or extended with translation. The cable companies may tend to improve and sometimes extend the station signal.

There are a number of areas in the state that do not receive any open broadcast video signal from a Virginia PTV station. Two counties, Bath and Highland, are located within a National Radio Quiet Zone. As such, the PTV station (WVPT) is not permitted to broadcast a signal into that area. Selected programs scheduled over WVPT and requested by these school divisions are taped by WVPT and bicycled to the schools.

All of the stations broadcast much more elementary ITV programming than high school programming. The total potential student audience is significantly reduced since adequate secondary programming is not available. Via the broadcast medium, only one program can be sent out at once. A second-grade level program, then, has a potential audience of 80,408 using 1978-79 fall enrollment figures.

The actual number of students watching any one second grade program may be considerably less than the 80,408. This is only to suggest that the large audience figures must be considered in context. The actual number viewing any program "live" or on tape may be quite a bit less than the initial figures suggest. Factors influencing the size of the audience, besides

the existence of a signal on tape and the size of the grade level population, include specific building schedule, availability of operating equipment, appropriateness of the specific material offered and the attitude of the teacher toward ITV as an instructional tool.

The Bureau of Teaching Materials distribution service permits more flexibility than the broadcast medium for schools equipped with a VCR and a receiver. A video tape can be retained for a week or more and used by a number of teachers in the same building. In fact, the program can be obtained by the division and retained for the division collection.

The BTM does not have, in its inventory, all of the programs required by the school divisions of Virginia. It operates only as a supplement to broadcast ITV at this time.

School divisions can and do purchase ITV programs independently. These programs are maintained at individual schools or at central media centers for distribution to requesting schools. School divisions may also elect to rent certain series or individual programs for a specified period of time.

Some school divisions such as Lynchburg Public Schools and Tazewell County Schools have agreements with cable companies and use one or more of the channels for instructional purposes. Lynchburg rebroadcasts WBRA and WVPT ITV programming at a later time, thus providing an alternative schedule. In addition, Lynchburg public schools can distribute its own informational and instructional programs to students, staff and the general public.

Utilization Service

A vital part of an effective instructional television service is utilization assistance. That is, the individual school division administrators and teachers must be kept informed of the instructional programming that is available and be properly trained to use the television medium effectively.

Teachers can receive this information and training in a number of ways. Teachers may take specific television utilization courses as a part of an on-going program of study at state colleges and universities. Individual school divisions, through curriculum or media coordinators, provide guidance for teachers in the utilization of television in instruction. The Department of Education provides statewide utilization service. The staff for this service is located in Richmond at station WVPT and at the DOE office in Radford. Some stations have their own staff who, along with the ITV coordinator, provide assistance to teachers in the utilization of television in instruction. This service is usually part of the state ITV contract.

Certain printed materials are available to assist teachers in the use of specific programs or series. These teachers guides are partially or wholly paid for through the contract. When the contract provides only partial support of the printed material service individual school divisions pay for additional copies of the guides.

As noted above, two major factors that affect the use of ITV, once programming is identified and a system for distribution set in operation, are the equipment necessary to receive the

signal or play the tape and display the picture and the expertise of the teacher in using television in instruction. Provision was made in the Master State Plan for Public Telecommunications for funds to be spent for acquisition and maintenance of equipment needed for signal reception and/or information display. Prior to the Master State Plan, the cost of ITV programming was paid directly by the participating school divisions with all costs over one dollar per pupil being reimbursed by the DOE. The Master State Plan includes the following: "The VPTC also understands that the modification of these ITV policies will also have the effect of requiring all local school divisions to spend specified sums in each year on various categories of needed telecommunications reception equipment (receivers, MATV systems, VTR recorders, etc.) and on enhances "utilization" skills for their teaching, administrative and para-professional personnel." (Master State Plan, Part I, p. 30).

It is not clear that there is adequate equipment to serve the potential audience in the school divisions. A shortage of equipment will have the effect of decreasing demand for equipment as teachers seek more available means of providing information.

A negative effect on utilization of ITV will also be realized if there is inadequate assistance in the instructional use of available programming. In spite of the services described above, the view was expressed by individuals involved in those utilization services that the current staff is not adequate to meet the needs of the school districts of 95 counties and 41

independent cities. In part, this is the result of DOE reduction in utilization staff in recent years.

Proper utilization of ITV requires, of course, the presence of equipment in operating condition. The State does not have an organized system for maintenance and repair of media equipment. School divisions receive some assistance through the contracted technical utilization services of individual PTV stations. The utilization service includes equipment operation orientation, and advice and planning assistance regarding equipment purchase and placement. The individuals performing these functions do perform some repair work.

Some individual districts do their own repair service, but the primary source of repair service is private vendors. Assistance in the selection of vendors and identification of fair prices is not readily available throughout the State.

Evidence specific to Virginia is not available, however, elsewhere dependence on private vendors has been shown to be not uniformly effective. As an example, the State of New York which operates regional repair services for media equipment, discontinued the service in select areas and individual districts depended upon private vendors. The vendors were unable to provide satisfactory service and the state repair was reinstituted.

MANAGEMENT

Management of the state's investments in instructional television (as noted) involves several administrative units at both state and school division levels of government and the community-based public television station. The process of bringing a particular program to the teacher via the TV monitor begins with the local station-formed regional school contract planning committee. Each of these governmental units' roles are discussed below.

RSCPC

The composition of the Regional Schools Contract Planning Committee is clearly described in the Master Plan. "Each telecommunications entity (PTV station) will then proceed to form a 'regional schools contract planning committee' to be composed of:

a. one representative from each of the participating school divisions, appointed by the superintendent,
b. one representative named by the Division of Telecommunications of the Department of Education,
c. one staff representative appointed by the chief operation officer of the (PTV) entity." (Master State Plan, Part I, p.25)

A representative of one of the school divisions is elected chairman of the RSCPC committee. According to the Master State Plan, the representative from the PTV station is to act as secretary for the committee.

The committee's purpose is "to recommend to VPTC the various eligible and accountable telecommunications services, capacities

and programs which should be made available, through the contracting entity, to the affected public school divisions under terms of the contract in the fiscal year to come." (Master State Plan, Part I, p. 25) Although the committee seems to have a required life of only six months (effectively September through February) the existing RSCPC do meet over a longer period of time.

The RSCPC meets regularly over a number of months to prepare a proposal for needed services. When the proposal has been completed, the Master State Plan describes the next activity of the RSCPC: "It will be the function of RSCPC to recommend to VPTC the various eligible and accountable telecommunications services, capacities and programs which should be made available, through the contracting entity, to the affected public school divisions . . ." (Master State Plan, Part I, p. 25) Additionally, the recommendations should be transmitted to the State Board of Education.

The proposals are also submitted to the individual school divisions superintendent for approval and if the superintendent does not approve of the plan, exceptions are ". . . directed to the VPTC through the Department of Education." Finally, the VPTC will, according to the Master State Plan ". . . act formally on the final recommendations adopted for each entity by the State Board of Education from the aggregated submissions of the local divisional superintendents. The VPTC, the Attorney General, and the PTV station should then undertake the necessary negotiations leading to contracts . . ." (Master State Plan, Part I, p. 25-26) Negotiations are conducted with the RSCPC and DOE available for consultation and a contract is signed. The RSCPC can be dissolved

after the contract has been signed. The RSCPC or subcommittees of it can, however, remain to advise on projects being undertaken as a part of the contract.

The Master State Plan is, at best, ambiguous regarding the position of the RSCPC. It is unclear to whom the RSCPC is responsible:

1. To the station: The RSCPC is formed by the PTV entity and, in fact, uses the PTV facilities for meetings. The Attorney General's legal opinion is that the RSCPC is a station committee.

2. To the school divisions it represents: All but two of the members are representatives of individual school divisions and the purpose of the committee is to propose services beneficial to the divisions. While the Master State Plan notes that the RSCPC can be dissolved, it fails to identify who has the authority to order such dissolution. The Master State Plan permits the school divisions to determine that the RSCPC will remain in existence. "Once a contract is drawn and authorized, a RSCPC can be dissolved unless the school divisions involved wish it to remain as an advisory group on public school projects to be operated as a result of the contract with VPTC (Master State Plan, Part I, p. 26).

3. To the DOE: The author of the Master State Plan has indicated that he envisioned the RSCPC as a committee of the Department of Education (Hall, 1979).

VPTC

The VPTC staff is divided into two functional units. One, the telemedia unit, has the responsibility of managing and overseeing the State's interests in television and other telemedia services and facilities. Included in this are the ITV service contracts.

An associate director for telemedia has the responsibility for negotiation and administration of grants made to each of the PTV

stations. The associate director provides assistance to colleges and other institutions of higher education in the State in the State in developing an institutional master plan for telecommunications development.

A contracts administrator oversees the five ITV service contracts with the PTV stations. Besides involvement in the negotiating process, the administrator is responsible for monitoring the contracts. This is done to insure that the proper services are being provided to the school divisions.

The contract negotiations and monitoring are the activities particularly related to the ITV service for the school divisions. The VPTC director and associate director, as well as the contracts administrator, take part in the negotiations. The task of monitoring the contract is, for the most part, carried out by the contracts administrator.

Monitoring is done in a number of ways. The contracts administrator visits the various stations to observe activities related to the contract. A monthly report is submitted to the VPTC by the individual stations describing what has been done. The RSCPC, although not required to report service status, often does keep the VPTC informed about the services delivered under the contract.

The VPTC does have some involvement with television in higher education. Each college and university, including community colleges, was asked to submit an institutional "master plan" for television. Master plans have been submitted by a number of these entities. Where master plans have been approved by the VPTC, the individual college does not have to maintain contact with the VPTC. That is, the entity can make equipment and service purchases without additional

approval of the VPTC. There has been no follow-up of the institutional master plans. The various institutions of higher education with approved master plans have not all progressed in the implementation of these plans. Some have done nothing since submitting the plan, while others have made great strides including significant variations in the original plan without requesting further approval from the VPTC.

The institutional master plan approach for higher education television has not been effectively conducted by the VPTC. This is most likely due to five factors:

1. inadequate staffing at the VPTC;
2. insufficient funds for the execution of the responsibilities;
3. lack of a statewide master plan for television in higher education;
4. lack of State funding to enable institutions of higher education to actually move beyond a written plan;
5. lack of interest in the promotion of instructional uses of television shown by institutions of higher education.

DOE

The Department of Education has two units with activities related to the use of instructional television. The BTM operates a videotape distribution service explained elsewhere in this paper. The supervisor of the BTM reports to the director of General Support Services.

The telecommunication service is more involved with the ITV service. The supervisor who also reports to the director of General Support Services has a staff of assistant supervisors. The service

identifies a number of activities for which it is responsible:

1. Provides in-service and information support.
2. Reviews all RSCPC requests for services and coordinates programatic decisions related to those requests.
3. Provide utilization services related to telecommunications (TV).
4. Facilitates resources in production of services by attempting to place a subject matter specialist on each production design committee.
5. Represents DOE at RSCPC meetings.
6. Facilitates offerings on television that relate to state curriculum and school district needs.
7. Maintain a vehicle for communication between the Board of Education, the DOE and the local divisions.

The relationships with other agencies such as VPTC and RSCPC as they impact the ITV services in the State have been detailed elsewhere in this paper.

FINANCIAL RELATIONSHIPS

Funds for the ITV services are appropriated by the State Legislature and pass through the VPTC for dissemination. Historically, this has been the case, although for a three-year period ending June 30, 1979, the funds did pass through the DOE. The process of spending the money begins when the VPTC determines how much will be available for the purchasing of contract services from each of the five PTV stations.

The RSCPC is composed of representatives from each of the school divisions in a station's coverage area. Some school divisions

receive the signal of more than one station and thus may have representation on more than one RSCPC. In addition, each station has a representative on the RSCPC. The DOE has a representative on the RSCPC. The RSCPC meets on a regular basis to prepare a proposal for the services that are needed from the station for the coming year. These services may include broadcast programming, tape duplication, program production, maintenance and printed teaching materials.

A negotiating session is scheduled. Present will be the appropriate station representatives, VPTC representatives, usually including the associate director and contracts administrator and DOE representatives. During the negotiations, some elements of the proposal may have to be dropped or modified.

The RSCPC submits a completed proposal to individual school division superintendents. At the same time, the proposal is submitted to the DOE. Individual school divisions are directed to indicate any dissatisfaction with the proposed plan to the DOE. The proposal reaches VPTC as described in the Master State Plan:

> "The VPTC will act formally on the final recommendations adopted for each entity by the State Board of Education from the aggregated submissions of the local divisional superintendents." (Master State Plan, Part I, p. 26)

It is not clear that the VPTC is now attempting to negotiate the contract proposed by the DOE. The VPTC has, in the past, disagreed with portions of the proposals authored by the DOE. The basis for the decision(s) is unclear at this time. The DOE is responsible for education in Virginia. The VPTC is responsible for the allocation of funds to support ITV, but makes decisions with educational impact.

Except to the degree that the DOE makes changes in the proposals submitted by the RSCPC, there should be no need for negotiation. The RSCPC and stations are aware of the amount of money available for the purchase of services. With that knowledge, the RSCPC should be able to design a proposal which, if not altered by any other party, would be acceptable to the station without discussion.

While there are those who feel that the VPTC does a good job of negotiating, one concern expressed was that the overhead and depreciation allowed for in the contract could not be justified when compared with the services actually listed in the contract and delivered. If the funds paid to the stations through the contract are for ITV services, it may be that more than a "fair share" of overhead and depreciation are being paid.

The contracting procedure as described in the Master State Plan is inconsistent with the actual procedures followed.

DOE

The Department of Education is involved with instructional television through two sub-groups. The Bureau of Teaching Materials (BTM) devotes about 10% of its budget ($18,000) to the operation of a videotape library and distribution system. The Division of Telecommunications directs all of its energies and $248,385.00, 1979-80 budget, toward instructional television.

School Divisions

Specific information regarding division outlays for ITV are not available. It is known, however, that the divisions do devote funds to instruction through television. The more obvious examples

of the spending are salaries for RSCPC representatives and the purchase and repair of video equipment.

VPTC

The VPTC will control more than $3 million primarily for instructional television during the fiscal year 1979-80. The smallest portion of the funds, $144,910 will pay salaries and operating costs for the administration of the VPTC telemedia sub-group.

During the same fiscal year, $566,666 in facilities grant funds will be distributed by the VPTC. These funds will be used along with 50% matching funds grants from other sources to install a transmitter and translator in order to extend the PTV/ITV coverage area in Virginia.

The five public television stations will receive $2,916,190 from the state through the VPTC. The Telecommunications Service receives a separate appropriation, $248,385, as a small amount of which is for production of the program On and About Instruction. The five PTV stations will receive $2,888,030 plus the $28,160 held in reserve for later distribution. The money paid to the stations (See Table I) is for services delivered under individual contracts negotiated with the stations in accordance with the Master State Plan.

Through the VPTC and DOE, then, more than $3,200,000 has been specifically allocated for instructional television in Virginia in this fiscal year.

TABLE I

Telecommunication Services Contract for Instructional Television

PTV Entity	1979-80 Contract
Central Virginia ETV Richmond WCVE/WCVW	$ 783,230
Central Virginia ETV Annandale WNVT	$ 520,900
Hampton Roads ETV Norfolk WHRO	$ 590,000
Blue Ridge ETV Roanoke & Norton WBRA/WSVN	$ 517,300
Shenandoah Valley ETV Harrisonburg WVPT	$ 476,600
Reserve for later distribution	$ 28,160
TOTAL APPROPRIATION	$2,916,190
(Budget Requests)	(3,157,920)

Cost Forecasting

Included in the responsibilities assigned to the VPTC through the Master State Plan for Public Telecommunications are a number that clearly are intended to permit the VPTC to "control" telemedia expenditures. Analysis of agency facility needs and examination of the merits and costs of these needs in relation to facility grants are among the responsibilities. Advising agencies and institutions about their own investments in telecommunications resources and capacities is also a responsibility.

The responsibilities suggest that the VPTC have an office assigned for keeping abreast of progress in the field. An awareness of current competitive prices and potential vendors for specific services is in order.

As noted earlier, the VPTC has not maintained a surveillance over the institutions of higher education. The institutions have failed to submit Master Plans or, with or without a Master Plan have contracted for services and facilities without the aid of the VPTC. The VPTC has been unable to expand its services to include the necessary level of oversight. The lack of such capability has certainly been felt in the area of ITV contracting for public schools. The annual duplication of tapes for Bath and Highland counties is an example of an expense that might well be reduced after analysis of alternative systems.

Inherent in the acceptance of the idea that the VPTC should "control" expenditures for telemedia is the recognition that the VPTC should be equipped to conduct long-range budgeting. The VPTC lacks a funded system for conducting or supporting research in order to keep up to date with technology. At the same time, its inability to keep up with the current status of telemedia in the

Commonwealth (save with occasional surveys) prevent it from making appropriate long-range analysis of needs and costs.

The Master State Plan calls for technological experimentation. Whether the State conducts the experiments or funds private companies is not as important as the monitoring of technological developments. Katzman has discussed the implications of technology:

> "In the future, technological change may have a great impact on ITV programming. Cable television, various video playback devices, and Instructional Television Fixed Service (ITFS) transmission may come to provide classroom teachers with multiple, flexible sources of television instruction. Much of the present justification for ITV that is broadcast by "open circuit" transmission is based on the fact that it is an inexpensive and relatively efficient means of providing programs. If and when other technologies such as cable TV and inexpensive video playback devices, challenge the relative efficiency of open circuit broadcasting for classroom use, the emphasis in public television instructional services may shift toward a greater quantity of material that can be used in the home. The advent of other technologies may be far in the distant future. When they come they will undoubtedly cause changes in the target groups served by open circuit transmission and the subject matter it provides."
>
> (Katzman, 1976, pp. 63-64)

The technologies have implications even beyond television in instruction. The full implications are not known. The State through some agency with ITV/PTV concerns should be guiding the educational institutions and the PTV stations toward continually improving capabilities in the future. It is not clear that the State is serving fully in that capacity even now.

SUMMARY

The contracts for ITV services negotiated with PTV stations are the result of the coordination of a number of State agencies. While there are some problems with the current system, it is in operation and a usable service is secured.

The broadcast medium is not the only method of distribution of programming. The Bureau of Teaching Materials operates a videotape library of limited size. School divisions often maintian their own videotape libraries and in some cases cable distribution systems.

The review of ITV in Virginia has led to a number of conclusions:

1. The system of contracting for ITV service in and as described in the Master State Plan, while functioning, is ambiguous regarding responsibilities and authorities.

2. The current program of ITV utilization promotion is limited in scope (due to inadequate funds and personnel).

3. The ITV funding system seems to serve as a means to also support public television generally rather than solely providing for ITV services.

4. There is very little research conducted or supported by the State to identify and perfect new technologies for use in instructional programming.

5. The statewide coordination of ITV production and service is hampered by the poorly defined responsibilities of agencies involved in ITV contracting.

6. There is no agency attempting to identify and evaluate alternative distribution systems such as a PTV network or enlarged library/bicycling system.

7. Guidance in and coordination of equipment purchases by individual school districts has not been adequately provided.

8. State financial support of ITV has not gone beyond the programming level. Equipment acquisition has not been funded by the State.

9. The participation of the RSCPC in ITV service selection is vital to any procedure followed and is consistent with the concept of local responsibility for and control over the teaching message.

10. The Department of Education has been unable to exercise some of its telecommunications responsibilities due to a shortage of staff and funds.

11. Production activities are not assigned with consideration of economy or quality.

12. While cable is being used by some school divisions for distribution, there is no active promoting of this potential by any State agency.

13. The activities of negotiating, approving technical aspects of a contract and allocation of funds tend to put unbalanced power in one agency.

14. There is no agency investigating the potential of networking for ITV.

15. The VPTC has been unable to exercise some of its telecommunications responsibilities due to a shortage of staff and funds.

References Cited

Delp, Mark, Memo to Dr. William C. Bosher, May 30, 1979.

Facing Up 13, Statistical Data on Virginia Public Schools, DOE.

Hall, George, Personal Communication, July 11, 1979.

Master State Plan for Public Telecommunications, Virginia Public Telecommunications Council, Commonwealth of Virginia.

Seibert, Ivan N., Educational Technology: A Handbook of Standard Terminology and a Guide for Recording and Reporting Information about Educational Technology, US DHEW, 1975.